

IN THE CLAIMS

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51. (cancelled)
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- 25 53. A method comprising:
- i) diagnosing in a patient a disease selected from the group consisting of:
Alzheimer's Disease; Acquired Immune Deficiency Syndrome; and autoimmune disease,
and

ii) administering to said patient 3-[2-[decahydro-6-hydroxy-5-(hydroxymethyl)-5,ha-dimethyl-2-methylene-1-naphthalenyl]ethylidene]-dihydro-4-hydroxy-2(3h)-furanone in an amount effective to combat said disease.

54. The method of claim 53, wherein said disease comprises autoimmune disease.

55. The method of claim 54, wherein said autoimmune disease comprises rheumatoid arthritis.

56. The method of claim 54, wherein said autoimmune disease comprises lupus exanthematous.

57. The method of claim 54, wherein said autoimmune disease comprises multiple sclerosis.

58. The method of claim 54, wherein said autoimmune disease comprises asthma.

59. The method of claim 54, wherein said autoimmune disease comprises allergic reaction.

60. The method of claim 54, wherein said autoimmune disease comprises a condition selected from: systemic dermatomyocytis; and psoriasis.

61. The method of claim 54, wherein said autoimmune disease comprises osteoarthritis.

62. The method of claim 54, wherein said autoimmune disease comprises diabetes mellitus.

63. The method of claim 54, wherein said an amount effective to combat said disease comprises from about 1 mg to about 5 mg of 3-[2-[decahydro-6-hydroxy-5-(hydroxymethyl)-5,ha-dimethyl-2-methylene-1-naphthalenyl]ethylidene]-dihydro-4-hydroxy-2(3h)-furanone per day, per kilogram of patient body weight.

64. The method of claim 53, wherein said disease comprises Alzheimer's Disease.

65. The method of claim 53, wherein said disease comprises Acquired Immune Deficiency Syndrome.

66. A method comprising:

i) diagnosing in a patient a disease, and

ii) administering to said patient 3-[2-[decahydro-6-hydroxy-5-(hydroxymethyl)-5,ha-dimethyl-2-methylene-1-naphthalenyl]ethylidene]-dihydro-4-hydroxy-2(3h)-furanone in an amount effective to affect said patient's immune system function.

67. The method of claim 66, wherein said amount effective comprises an amount effective to activate peroxysome proliferator activated receptor ?.

68. The method of claim 66, wherein said amount effective comprises an amount effective to reduce the activity of an inflammatory cytokine.

69. The method of claim 68, said inflammatory cytokine comprising interleukin-2.

70. The method of claim 68, said inflammatory cytokine comprising interferon γ .

71. The method of claim 66, wherein said amount effective comprises an amount effective to inhibit NF κ B.

72. The method of claim 66, wherein said amount effective comprises an amount effective to inhibit T-cell proliferation.

73. A method comprising:

- i) identifying in a person the possible presence of Syndrome X, and
- ii) administering to said person a substance selected from the group consisting of: *Andrographis paniculata*; and an *Andrographis paniculata* extract containing 3-[2-decahydro-6-hydroxy-5-(hydroxymethyl)-5,8a-dimethyl-2-methylene-1-naphthalenyl]ethylidene]-dihydro-4-hydroxy-2(3H)-furanone; said substance administered in an amount effective to combat Syndrome X.